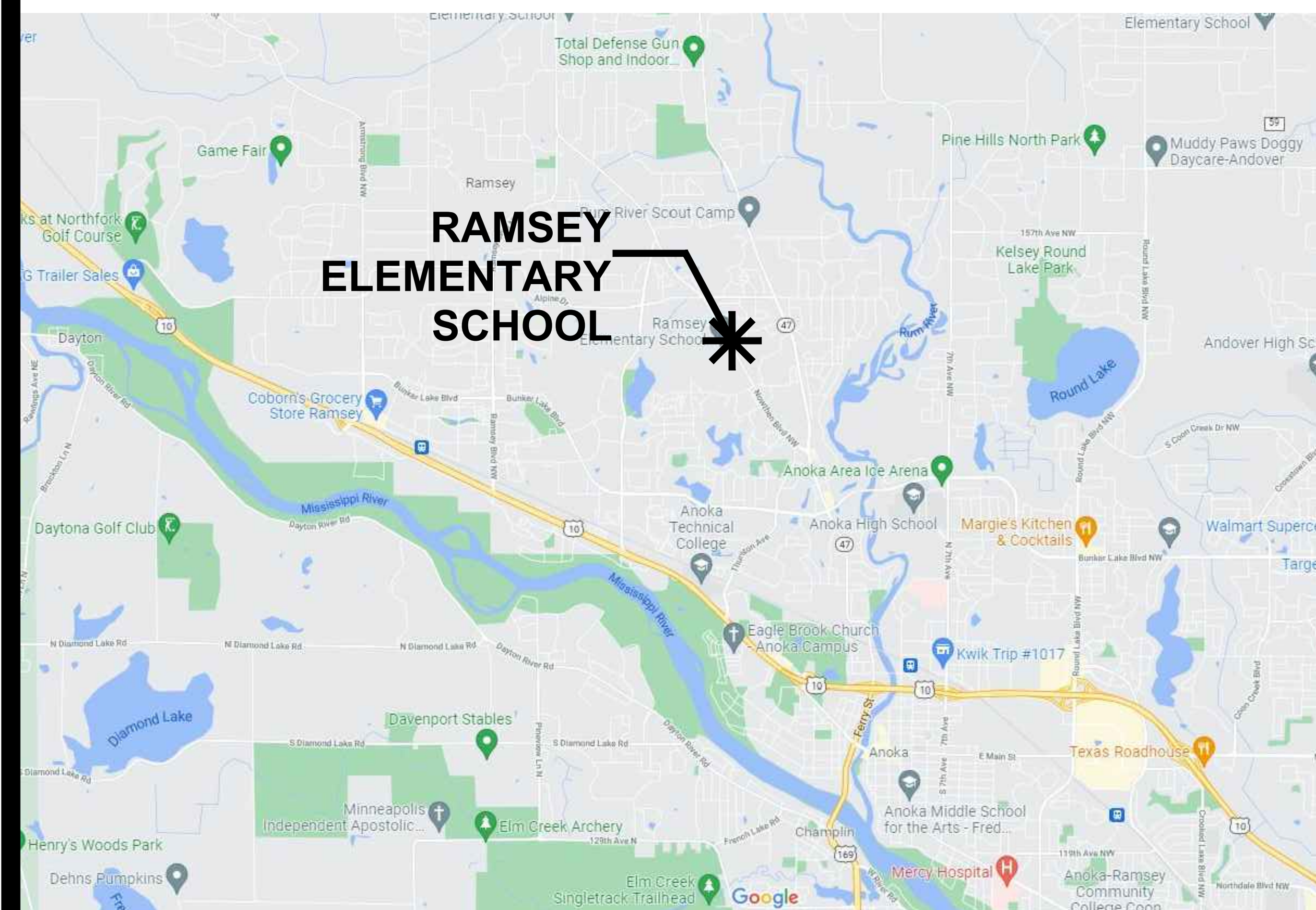


# RAMSEY ELEMENTARY SCHOOL STORMWATER IMPROVEMENTS

## Ramsey Elementary School 15100 County Road 5 Anoka, MN 55303

### VICINITY MAP



### GENERAL NOTES

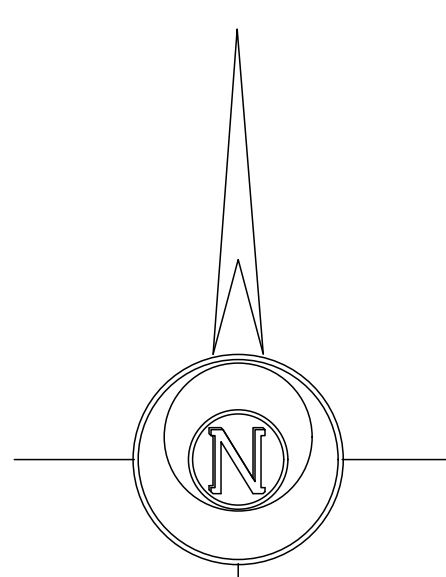
#### GENERAL NOTES

1. ALL CONSTRUCTION MUST COMPLY WITH APPLICABLE STATE AND LOCAL ORDINANCES.
2. THE CONTRACTOR WILL BE RESPONSIBLE FOR AND SHALL PAY FOR ALL CONSTRUCTION STAKING / LAYOUT.
3. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL RELATED CONSTRUCTION PERMITS. SUBMIT A COPY OF ALL PERMITS TO THE CITY.
4. INSTALL CONTROL FENCING AND BARRICADING AS NECESSARY TO PROTECT THE PUBLIC.
5. INSPECT SITE AND REVIEW SOIL BORINGS TO DETERMINE EXTENT OF WORK AND NATURE OF MATERIALS TO BE HANDLED.
6. REFER TO SPECIFICATIONS FOR DEWATERING REQUIREMENTS.
7. CHECK ALL PLAN AND DETAIL DIMENSIONS AND VERIFY SAME BEFORE FIELD LAYOUT.
8. MAINTAIN ADJACENT PROPERTY AND PUBLIC STREETS CLEAN FROM CONSTRUCTION CAUSED DIRT AND DEBRIS ON A DAILY BASIS. PROTECT DRAINAGE SYSTEMS FROM SEDIMENTATION AS A RESULT OF CONSTRUCTION RELATED DIRT AND DEBRIS.
9. MAINTAIN DUST CONTROL DURING GRADING OPERATIONS.
10. ALL EROSION CONTROL METHODS SHALL COMPLY WITH MPCA AND LOCAL REGULATIONS.
11. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO SITE AND PROTECT EXISTING SITE FEATURES (INCLUDING TURF AND VEGETATION) WHICH ARE TO REMAIN.
12. PROPOSED CONTOURS AND SPOT ELEVATIONS ARE SHOWN TO FINISH GRADE UNLESS OTHERWISE NOTED.
13. PROPOSED ELEVATIONS SHOWN TYPICALLY AS 74.1 OR 74 SHALL BE UNDERSTOOD TO MEAN 874.1 OR 874.
14. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING QUANTITIES OF CUT, FILL AND WASTE MATERIALS TO BE HANDLED, AND FOR AMOUNT OF GRADING TO BE DONE IN ORDER TO COMPLETELY PERFORM ALL WORK INDICATED ON THE DRAWINGS. IMPORT SUITABLE MATERIAL AND EXPORT UNSUITABLE / EXCESS / WASTE MATERIAL AS REQUIRED. ALL COSTS ASSOCIATED WITH IMPORTING AND EXPORTING MATERIALS SHALL BE INCIDENTAL TO THE CONTRACT.
15. NO FINISHED SLOPES SHALL EXCEED 4' HORIZONTAL TO 1' VERTICAL (4:1), UNLESS OTHERWISE NOTED.
16. ALL DISTURBED AREAS SHALL RECEIVE AT LEAST 6" OF TOPSOIL AND SHALL BE SEEDDED.
17. FAILURE OF TURF DEVELOPMENT: IN THE EVENT THE CONTRACTOR FAILS TO PROVIDE AN ACCEPTABLE TURF, THE CONTRACTOR SHALL RE-SEED ALL APPLICABLE AREAS, AT NO ADDITIONAL COST TO THE OWNER, TO THE SATISFACTION OF THE ENGINEER.
18. ALL STORM SEWER PIPE SHALL BE RCP, CLASS III (MIN.), WITH FLEXIBLE WATERTIGHT JOINTS IN ACCORDANCE WITH ASTM C-361 UNLESS OTHERWISE NOTED.
19. FLEXIBLE JOINTS AT STORM SEWER PIPE CONNECTIONS TO STRUCTURES:
  - a. IN ACCORDANCE WITH MINNESOTA PLUMBING CODE, PROVIDE FLEXIBLE JOINTS AT ALL PIPE CONNECTIONS TO ALL STORM SEWER STRUCTURES.
  - b. ACCEPTABLE MANUFACTURERS / PRODUCTS:
    - i. FERCO, "CONCRETE MANHOLE ADAPTORS" OR "LARGE-DIAMETER WATERSTOPS"
    - ii. PRESS-SEAL WATERSTOP GROUTING RINGS
    - iii. OR APPROVED EQUAL.
20. ANY MANHOLE, STORM SEWER OR OTHER POTENTIAL SOURCE FOR CONTAMINATION SHALL BE INSTALLED AT LEAST 10 FEET HORIZONTALLY FROM ANY WATERMAIN PER MINNESOTA PLUMBING CODE. THIS ISOLATION DISTANCE SHALL BE MEASURED FROM THE OUTER EDGE OF THE PIPE TO THE OUTER EDGE OF THE CONTAMINATION SOURCE (OUTER EDGE OF STRUCTURES OR PIPING OR SIMILAR).
21. LOCATE ALL EXISTING UTILITIES, VERIFY LOCATION, SIZE AND INVERT ELEVATION OF ALL EXISTING UTILITIES. VERIFY LOCATIONS, SIZES AND ELEVATIONS OF SAME BEFORE BEGINNING CONSTRUCTION.

### DRAWING INDEX

- C1.0 TITLE PAGE
- C1.1 EXISTING CONDITIONS AND REMOVALS PLAN
- C1.2 SITE PLAN
- C1.3 GRADING AND DRAINAGE PLAN
- C1.4 UTILITY AND SEDIMENT CONTROL PLAN
- C2.1 SITE DETAILS
- EXH1 RAMSEY ELEMENTARY SCHOOL SITE SURVEY (SHEET 1 OF 4)

### SITE LOCATION MAP





**NOTES:**

1. REFER TO SHEET C1.0, TITLE PAGE, FOR GENERAL NOTES.
2. MINIMIZE DISTURBANCE TO SITE AND PROTECT EXISTING VEGETATION AND SITE FEATURES (CURBS, WALKS, PAVEMENTS, OVERHEAD AND UNDERGROUND UTILITIES, SIGNAGE, FENCING, ROADWAYS, ETC.) WHICH ARE TO REMAIN.
3. REPAIR OR REPLACE EXISTING PROPERTY AND SITE FEATURES, INCLUDING GRASS AND VEGETATION, WHICH IS TO REMAIN THAT IS DAMAGED BY THE WORK, TO OWNER'S SATISFACTION AND AT NO ADDITIONAL COST TO THE OWNER.
4. VISIT THE SITE PRIOR TO BIDDING; BE FAMILIAR WITH ACTUAL CONDITIONS IN THE FIELD. EXTRA COMPENSATION WILL NOT BE ALLOWED FOR CONDITIONS WHICH COULD HAVE BEEN DETERMINED OR ANTICIPATED BY EXAMINATION OF THE SITE. THE CONTRACT DRAWINGS AND THE INFORMATION AVAILABLE PERTAINING TO EXISTING SOILS, UTILITIES AND OTHER SITE CHARACTERISTICS.
5. THE CONTRACTOR SHALL HIRE THE SERVICES OF A UTILITY LOCATOR COMPANY TO LOCATE ALL PRIVATELY OWNED UTILITIES THAT MAY BE DISTURBED BY CONSTRUCTION OPERATIONS.
6. TREE PROTECTION: INSTALL ORANGE SNOW FENCING AT DRIP LINE.
7. SEE SITE LOCATION MAP ON SHEET C1.0 FOR ROCK CONSTRUCTION ENTRANCE LOCATION

**LEGEND**



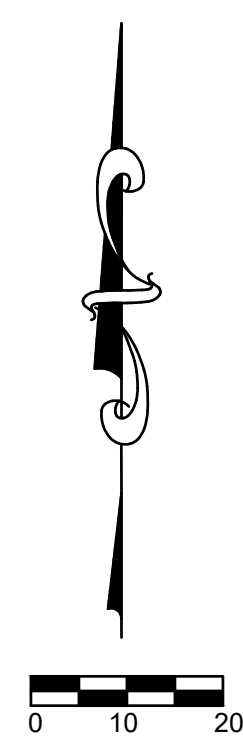
Project No.	DL12532
Date	03/07/2022
Drawn By	BJD
Checked By	JBR
Revisions	

**EXISTING CONDITIONS AND REMOVALS PLAN**

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Landscape Architect under the laws of the State of Minnesota.  
**JAY R. POMEROY**  
 Reg. No. 25593 Date 03/07/2022

**BOLTON & MENK**  
 7575 GOLDEN VALLEY ROAD, SUITE 200  
 MINNEAPOLIS, MN. 55427

**RAMSEY ELEMENTARY SCHOOL  
 STORMWATER IMPROVEMENTS**  
 ANOKA-HENNING SCHOLS  
 15000 County Highway 5  
 Ramsey, MN. 55303





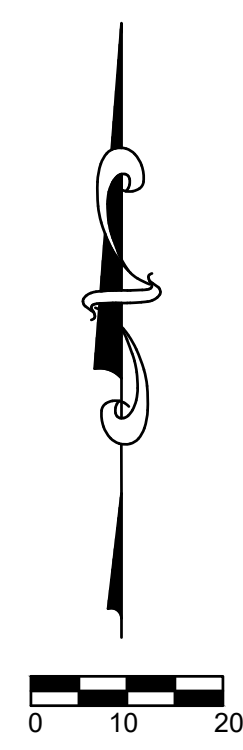
**1**  
C1.2 **SITE PLAN BASE BID**  
SCALE: 1" = 20'

**2**  
C1.2 **SITE PLAN ALTERNATE #1**  
SCALE: 1" = 20'

**LEGEND**

	REFERENCE KEY TO SITE DETAILS DETAIL I.D NUMBER (TOP) DETAIL SHEET NUMBER (BOTTOM)
	PROPOSED MANHOLE (MH)
	PROPOSED FLARED END SECTION (FES)
	APPROXIMATE SEED LIMITS
	PROPERTY LINE

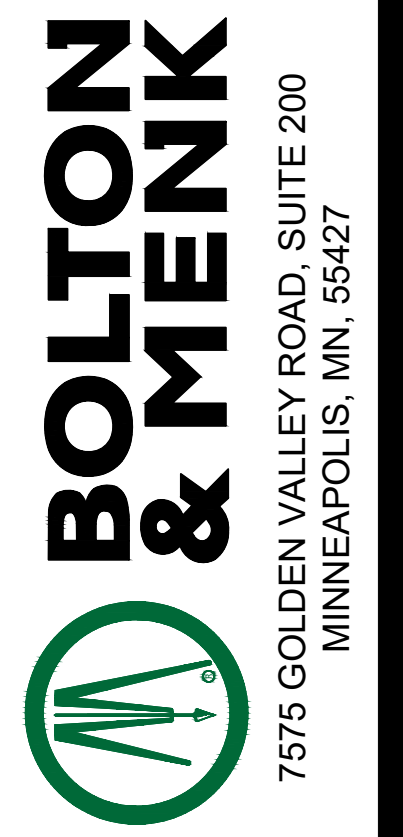
- NOTES:**
- REFER TO SHEET C1.0, TITLE PAGE, FOR GENERAL NOTES.
  - CHECK ALL PLAN AND DETAIL DIMENSIONS AND VERIFY SAME BEFORE FIELD LAYOUT.
  - ALL DISTURBED AREAS SHALL RECEIVE AT LEAST 6" OF TOPSOIL AND SHALL BE SEEDDED.
  - FAILURE OF TURF DEVELOPMENT: IN THE EVENT THE CONTRACTOR FAILS TO PROVIDE AN ACCEPTABLE TURF, THE CONTRACTOR SHALL RE-SEED ALL APPLICABLE AREAS, AT NO ADDITIONAL COST TO THE OWNER, TO THE SATISFACTION OF THE ENGINEER.



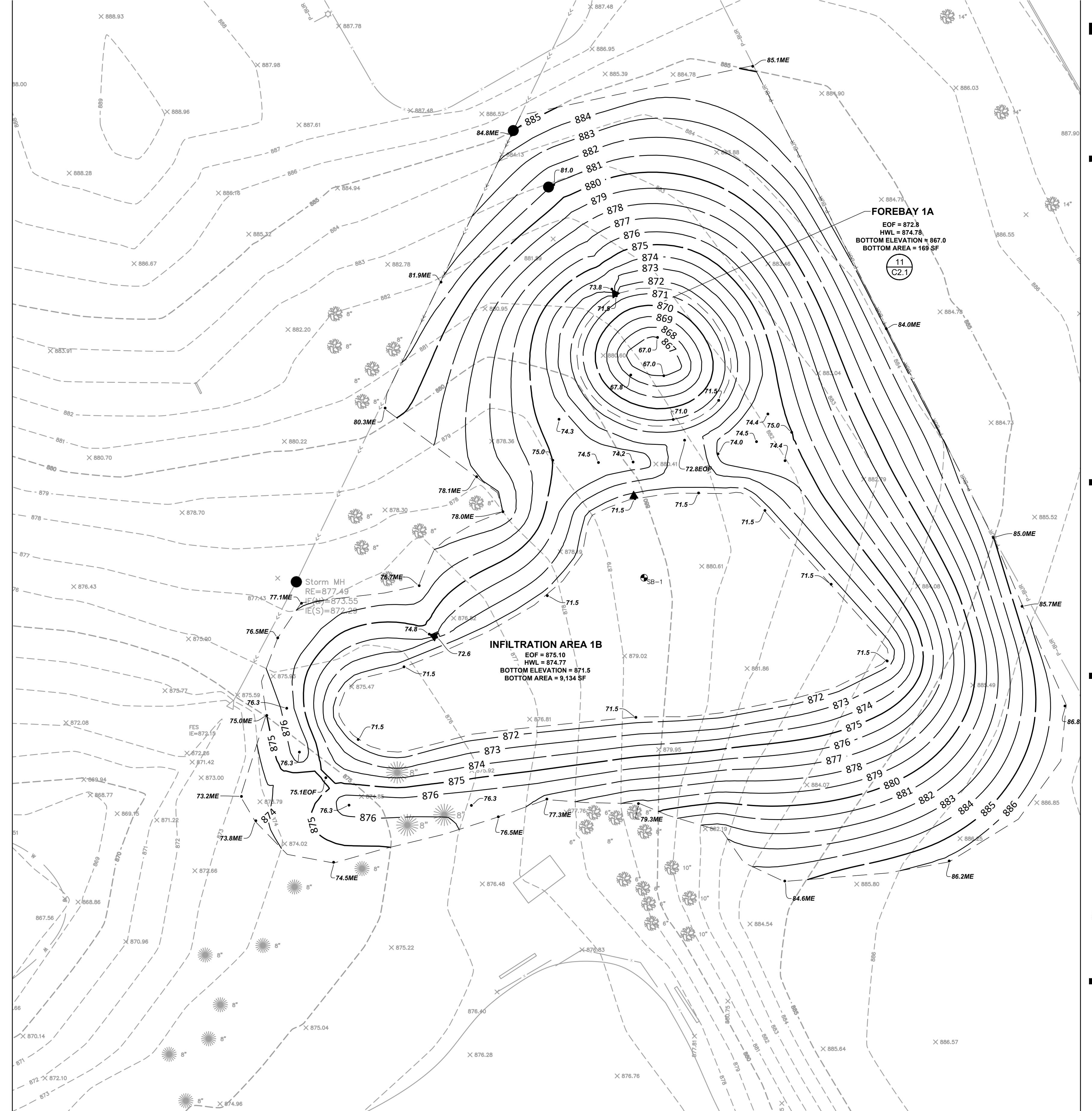
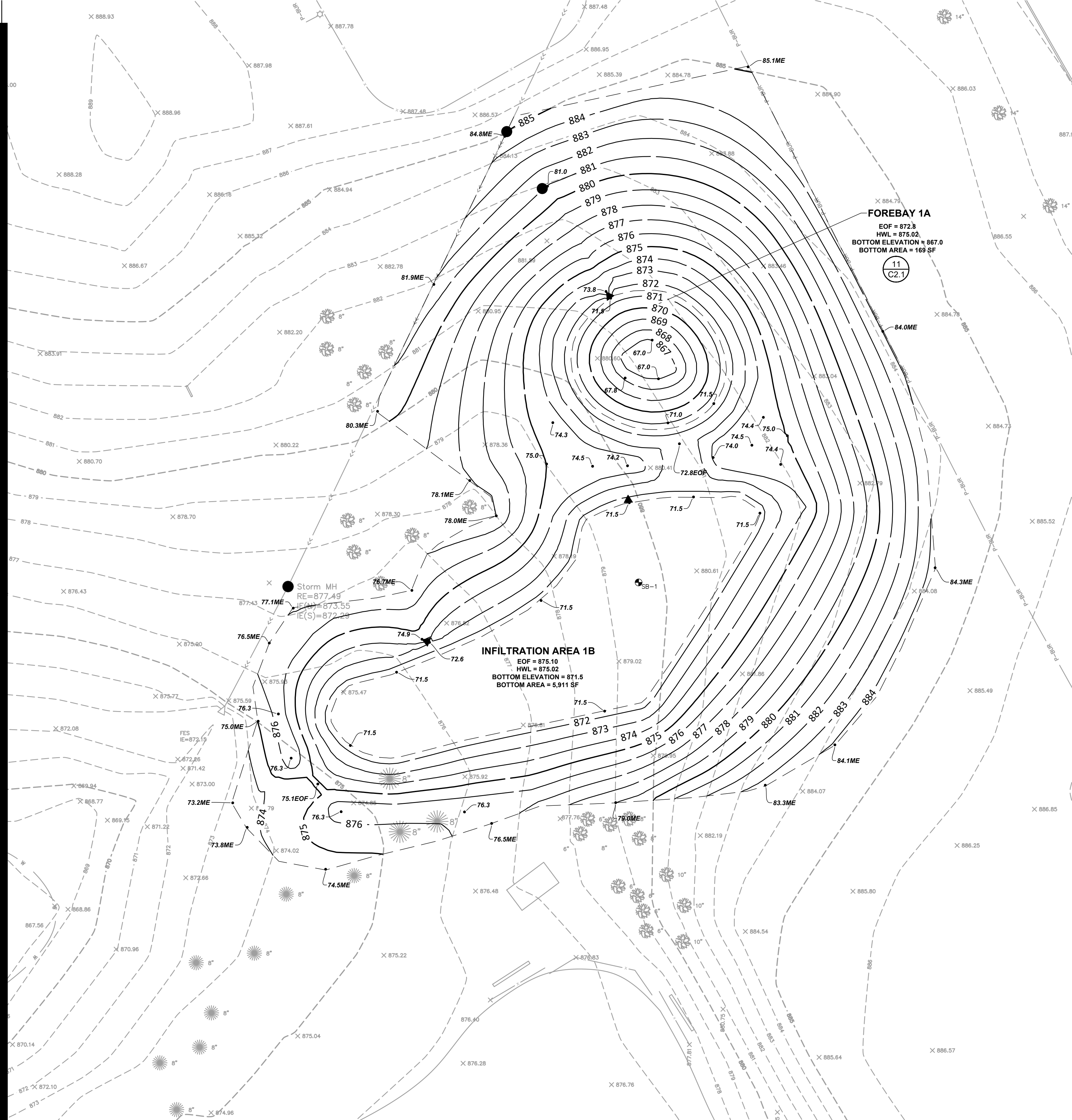
Project No. 01125332  
Date 03/07/2022  
Drawn By BJD  
Ck. By JBR  
Revisions

**SITE PLAN**

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Landscape Architect under the laws of the State of Minnesota.  
JAY R. POMEROY  
Reg. No. 25593 Date 03/07/2022



**RAMSEY ELEMENTARY SCHOOL  
STORMWATER IMPROVEMENTS**  
ANOKA-HENNINGEN SCHOOLS  
15000 County Highway 5  
Ramsey, MN, 55303



**1**  
C1.3 GRADING AND DRAINAGE PLAN BASE BID  
SCALE: 1" = 20'

**2**  
C1.3 GRADING AND DRAINAGE PLAN ALTERNATE #1  
SCALE: 1" = 20'

**LEGEND**

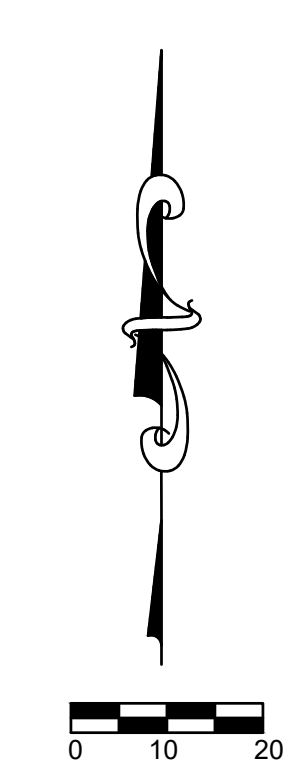
- REFERENCE KEY TO SITE DETAILS  
DETAIL I.D NUMBER (TOP)  
DETAIL SHEET NUMBER (BOTTOM)
- 875 EXISTING CONTOUR
- X 875.46 EXISTING SPOT ELEVATION
- 875 PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION  
ME = MATCH EXISTING  
EOF = EMERGENCY OVERFLOW
- PROPOSED GRADING LIMITS
- APPROXIMATE SOIL BORING LOCATION
- PROPOSED MANHOLE (MH)
- PROPOSED FLARED END SECTION (FES)
- PROPERTY LINE

**NOTES**

1. REFER TO SHEET C1.0, TITLE PAGE, FOR GENERAL NOTES.

**BENCHMARKS** (FIELD VERIFY BEFORE USING)

1. TOP NUT HYDRANT NEAR THE SOUTHWEST BUILDING CORNER OF RAMSEY ELEMENTARY SCHOOL.  
Elevation = 890.01 FEET (NGVD 1929)
2. TOP NUT HYDRANT IN THE SOUTHWESTERLY QUADRANT OF NOWTHEN BOULEVARD AND ENTRANCE TO THE NORTH LOT OF RAMSEY ELEMENTARY SCHOOL.  
Elevation = 893.99 FEET (NGVD 1929)



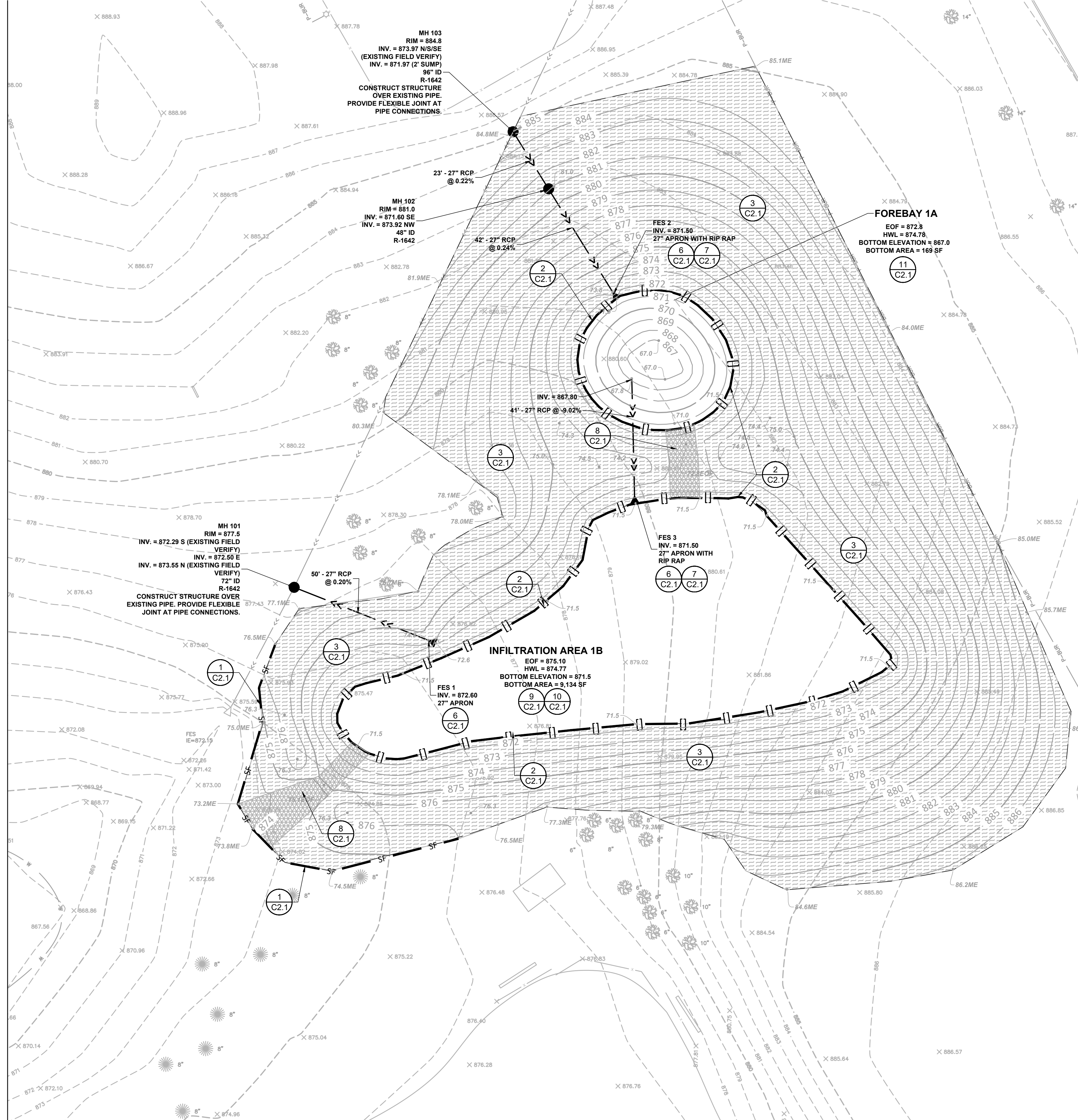
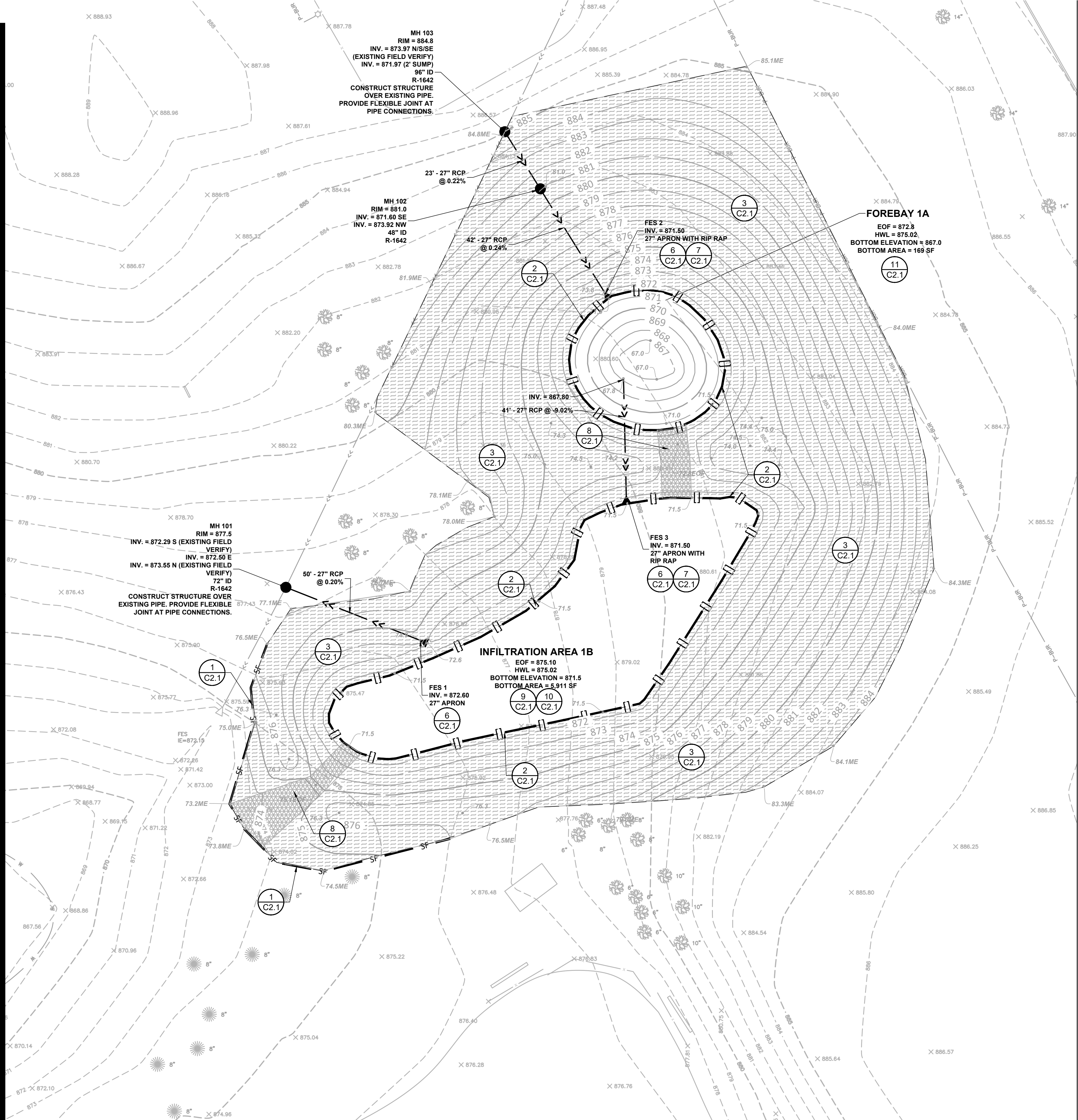
Project No.	0112532
Date	03/07/2022
Drawn By	JJD
Checked By	JBR
Revisions	

**GRADING AND DRAINAGE PLAN**

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Landscape Architect under the laws of the State of Minnesota.  
JAY R. POMEROY  
Reg. No. 25593 - Exp. 03/07/2022

**BOLTON & MENK**  
7575 GOLDEN VALLEY ROAD, SUITE 200  
MINNEAPOLIS, MN 55427

**RAMSEY ELEMENTARY SCHOOL  
STORMWATER IMPROVEMENTS**  
ANOKA-HENNING SCHOLS  
15000 County Highway 5  
Ramsey, MN, 55303



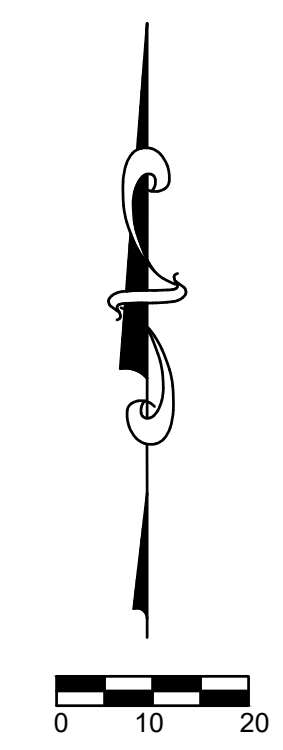
**1**  
**C1.4** UTILITY AND SEDIMENT CONTROL PLAN BASE BID  
SCALE: 1" = 20'

**2**  
**C1.4** UTILITY AND SEDIMENT CONTROL PLAN ALTERNATE #1  
SCALE: 1" = 20'

**APPROXIMATE EROSION CONTROL DEVICE QUANTITIES**  
SILT FENCE = 144 L.F.  
SEDIMENT CONTROL LOG: 531 L.F. (BASE BID)  
608 L.F. (ALTERNATE)  
ROCK CONSTRUCTION ENTRANCE = 25 C.Y. (SEE SITE LOCATION MAP ON SHEET C1.0)

- LEGEND**
- REFERENCE KEY TO SITE DETAILS  
DETAIL ID NUMBER (TOP)  
DETAIL SHEET NUMBER (BOTTOM)
  - EXISTING CONTOUR
  - EXISTING SPOT ELEVATION
  - PROPOSED CONTOUR
  - PROPOSED SPOT ELEVATION  
ME = MATCH EXISTING  
EOP = EMERGENCY OVERFLOW
  - PROPOSED GRADING LIMITS
  - PROPOSED STORM SEWER
  - PROPOSED MANHOLE (MH)
  - PROPOSED FLARED END SECTION (FES)
  - PROPOSED SILT FENCE
  - PROPOSED SEDIMENT CONTROL LOG
  - PROPOSED POND CONTROL BLANKET
  - PROPOSED POND OVERFLOW SWALE
  - PROPERTY LINE

- NOTES**
1. REFER TO SHEET C1.0, TITLE PAGE, FOR GENERAL NOTES.
  2. ALL STORM SEWER PIPE SHALL BE RCP, CLASS III (MIN.), WITH FLEXIBLE WATERTIGHT JOINTS IN ACCORDANCE WITH ASTM C-361 UNLESS OTHERWISE NOTED.
  3. FLEXIBLE JOINTS AT STORM SEWER PIPE CONNECTIONS TO STRUCTURES:
    - a. IN ACCORDANCE WITH MINNESOTA PLUMBING CODE, PROVIDE FLEXIBLE JOINTS AT ALL PIPE CONNECTIONS TO ALL STORM SEWER STRUCTURES.
    - b. ACCEPTABLE MANUFACTURERS / PRODUCTS:
      - i. FERRO, "CONCRETE MANHOLE ADAPTORS" OR "LARGE-DIAMETER WATERSTOPS"
      - ii. PRESS-SEAL, WATERSTOP GROUTING RINGS"
      - iii. OR APPROVED EQUAL.
  4. ANY MANHOLE, STORM SEWER OR OTHER POTENTIAL SOURCE FOR CONTAMINATION SHALL BE INSTALLED AT LEAST 10 FEET HORIZONTALLY FROM ANY WATERMAIN PER MINNESOTA PLUMBING CODE. THIS ISOLATION DISTANCE SHALL BE MEASURED FROM THE OUTER EDGE OF THE PIPE TO THE OUTER EDGE OF THE CONTAMINATION SOURCE (OUTER EDGE OF STRUCTURES OR PIPING OR SIMILAR).
  5. LOCATE ALL EXISTING UTILITIES, VERIFY LOCATION, SIZE AND INVERT ELEVATION OF ALL EXISTING UTILITIES. VERIFY LOCATIONS, SIZES AND ELEVATIONS OF SAME BEFORE BEGINNING CONSTRUCTION.
  6. MAINTAIN ADJACENT PROPERTY AND PUBLIC STREETS CLEAN FROM CONSTRUCTION CAUSED DIRT AND DEBRIS ON A DAILY BASIS. PROTECT DRAINAGE SYSTEMS FROM SEDIMENTATION AS A RESULT OF CONSTRUCTION RELATED DIRT AND DEBRIS.
  7. MAINTAIN DUST CONTROL DURING GRADING OPERATIONS.
  8. ALL EROSION CONTROL METHODS SHALL COMPLY WITH MPCA AND OTHER LOCAL REGULATIONS.
  9. IF EROSION AND SEDIMENT CONTROL MEASURES TAKEN ARE NOT ADEQUATE AND RESULT IN DOWNSTREAM SEDIMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING OUT DOWNSTREAM STORM SEWERS AS NECESSARY, INCLUDING ASSOCIATED RESTORATION.
  10. INLET PROTECTION DEVICE AT STORM SEWER INLETS. AT THE INLETS TO ALL STORM SEWER STRUCTURES, PROVIDE A PRODUCT FROM THE FOLLOWING LIST, APPROVED PRODUCTS:
    - a. ROAD DRAIN "TOP SLAB", MANUFACTURED BY WIMCO
    - b. ROAD DRAIN "CURB & GUTTER", MANUFACTURED BY WIMCO
    - c. INFRASAFE "SEDIMENT CONTROL BARRIER", MANUFACTURED BY ROYAL ENVIRONMENTAL SYSTEMS, INC.
    - d. INFRASAFE "DEBRIS COLLECTION DEVICE", MANUFACTURED BY ROYAL ENVIRONMENTAL SYSTEMS, INC.
    - e. INFRASAFE "CULVERT INLET PROTECTOR", MANUFACTURED BY ROYAL ENVIRONMENTAL SYSTEMS, INC.
    - f. DANDY SACK, MANUFACTURED BY DANDY PRODUCTS, INC.
    - g. DANDY CURB SACK, MANUFACTURED BY DANDY PRODUCTS, INC.
    - h. OR APPROVED EQUAL.
  11. PRIOR TO CONSTRUCTION, DELINEATE TURF AND VEGETATED AREAS NOT TO BE DISTURBED WITH ORANGE SNOW FENCE. NO CONSTRUCTION TRAFFIC, EQUIPMENT OR MATERIALS SHALL BE PERMITTED TO UTILIZE, ACCESS OR OTHERWISE ENTER THE AREAS DESIGNATED NOT TO BE DISTURBED. MINIMIZE SOIL COMPACTION AND DISRUPTION OF TOPSOIL IN AREAS OUTSIDE THE CONSTRUCTION LIMITS TO COMPLY WITH MN CONSTRUCTION STORMWATER GENERAL PERMIT.



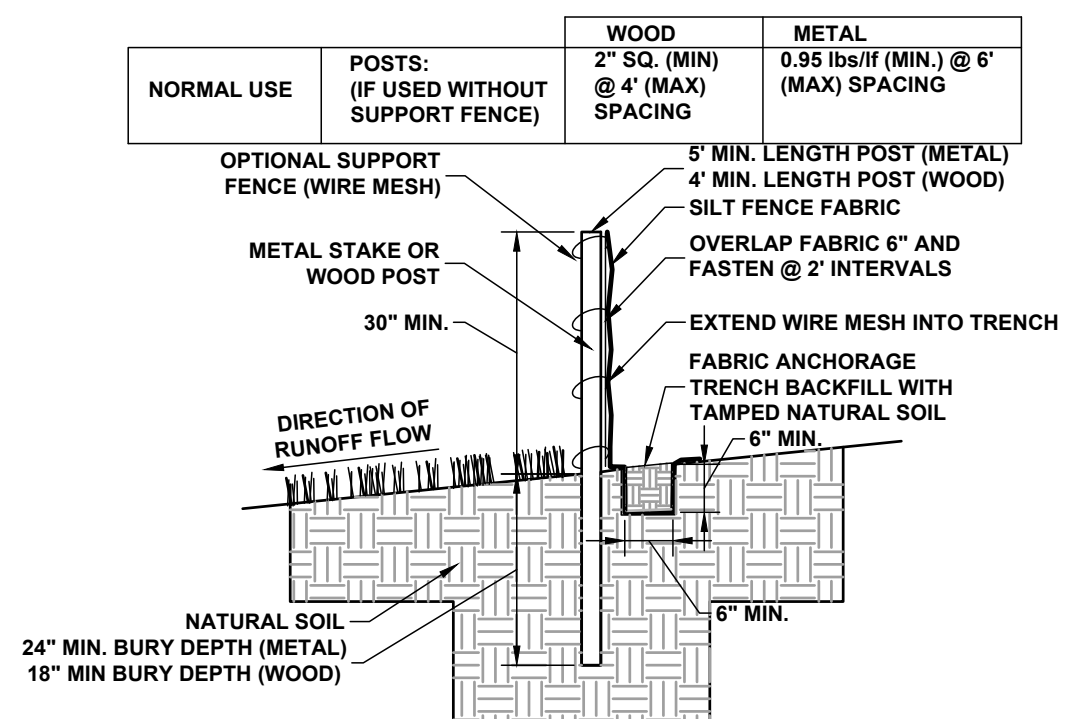
Project No.	DL12532
Date	03/07/2022
Drawn By	BJD
Checked By	JAR
Revisions	

**UTILITY AND SEDIMENT CONTROL PLAN**

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Minnesota.  
DAVID A. REY  
Reg. No. 40380 Date 03/03/2022

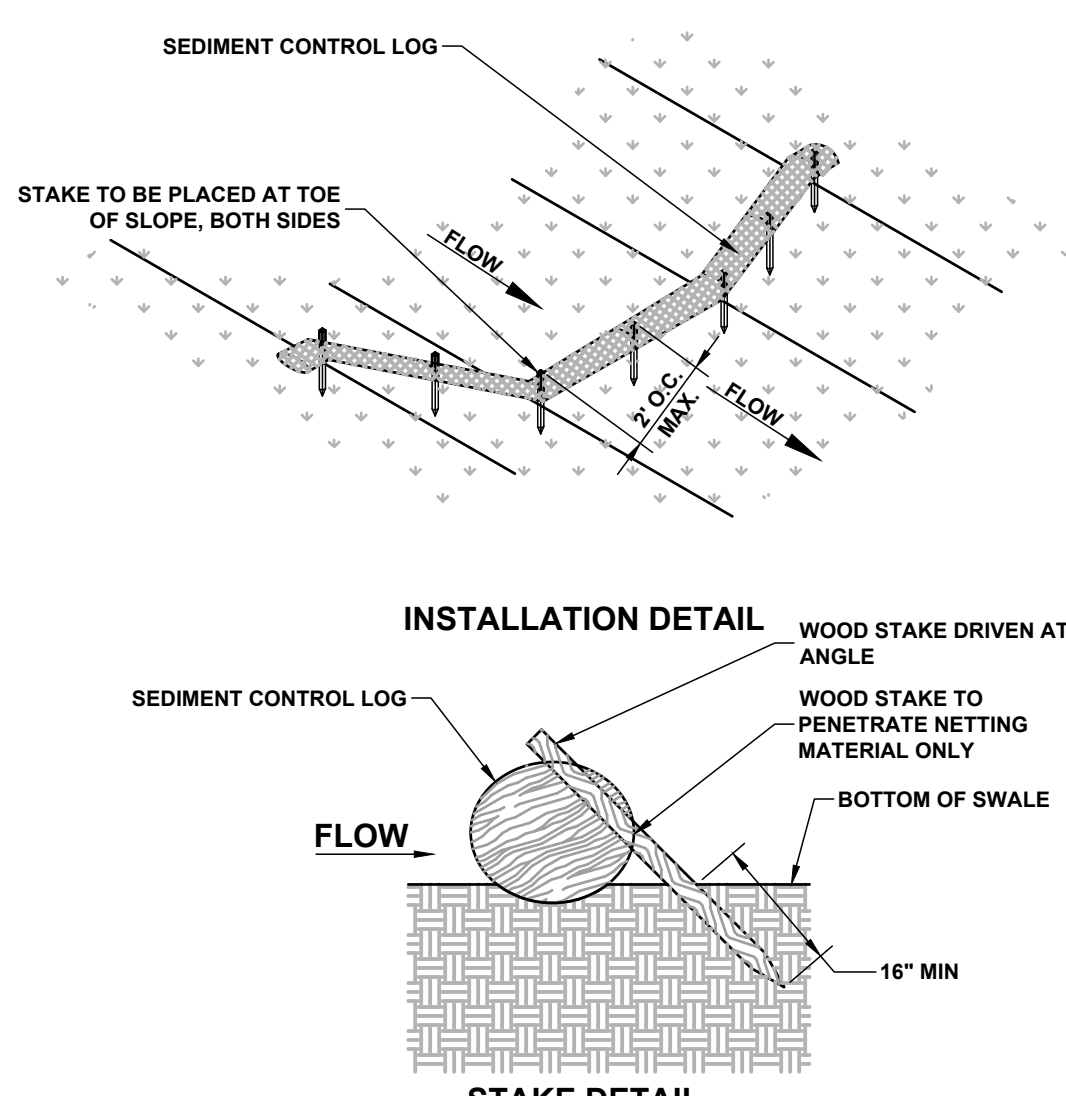
**BOLTON & MENK**  
7575 GOLDEN VALLEY ROAD, SUITE 200  
MINNEAPOLIS, MN 55427

**RAMSEY ELEMENTARY SCHOOL STORMWATER IMPROVEMENTS**  
ANOKA-HENNEPIN SCHOOLS  
15000 County Highway 5  
Ramsey, MN 55303

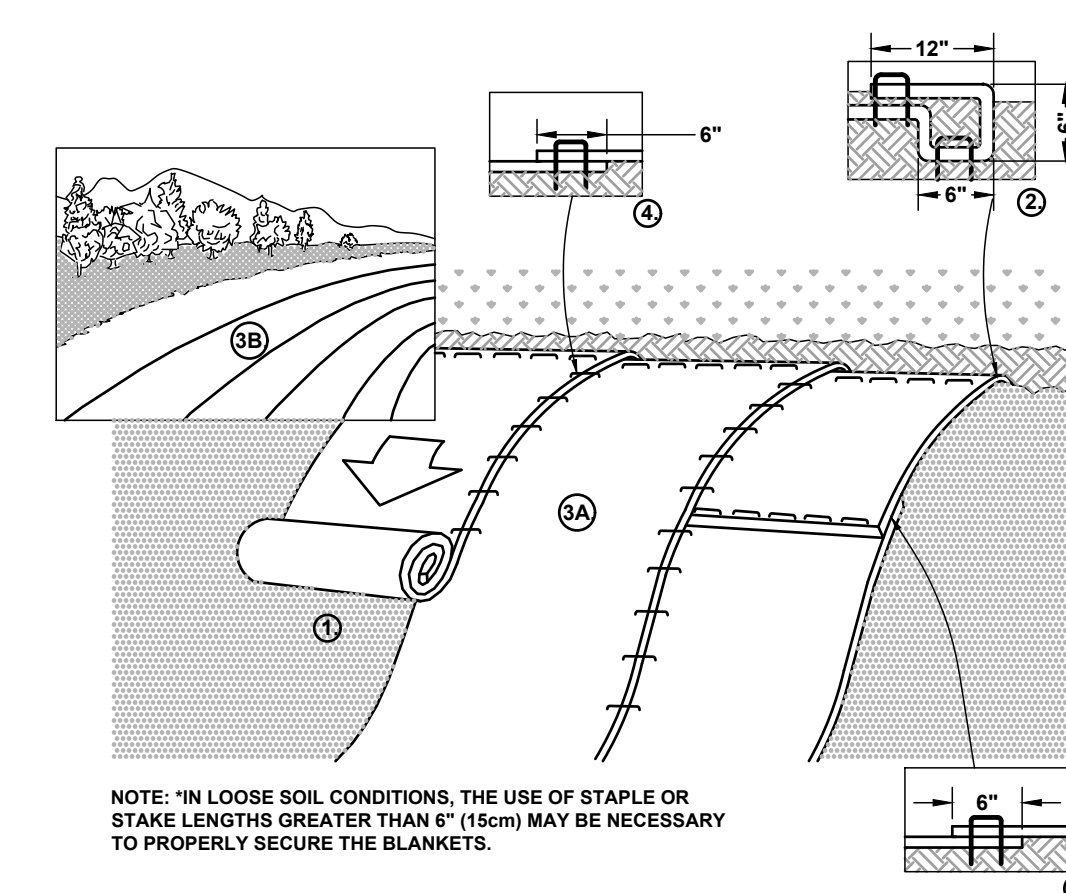


NOTE: DEPENDING UPON CONFIGURATION, ATTACH TO WIRE MESH WITH HOG RINGS, STEEL POSTS WITH THE WIRES, OR WOOD POSTS WITH STAPLES.

**1**  
C2.1 **SILT FENCE**

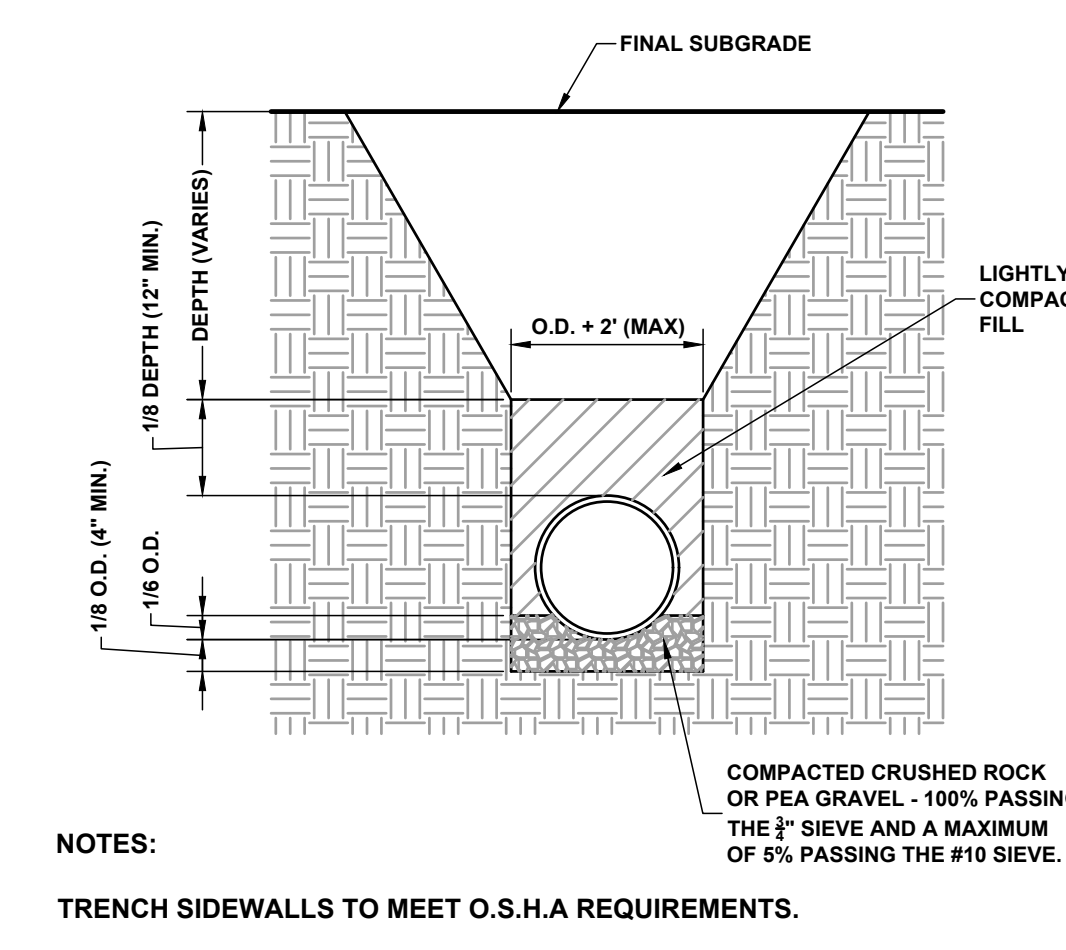


**2**  
C2.1 **SEDIMENT CONTROL LOG**



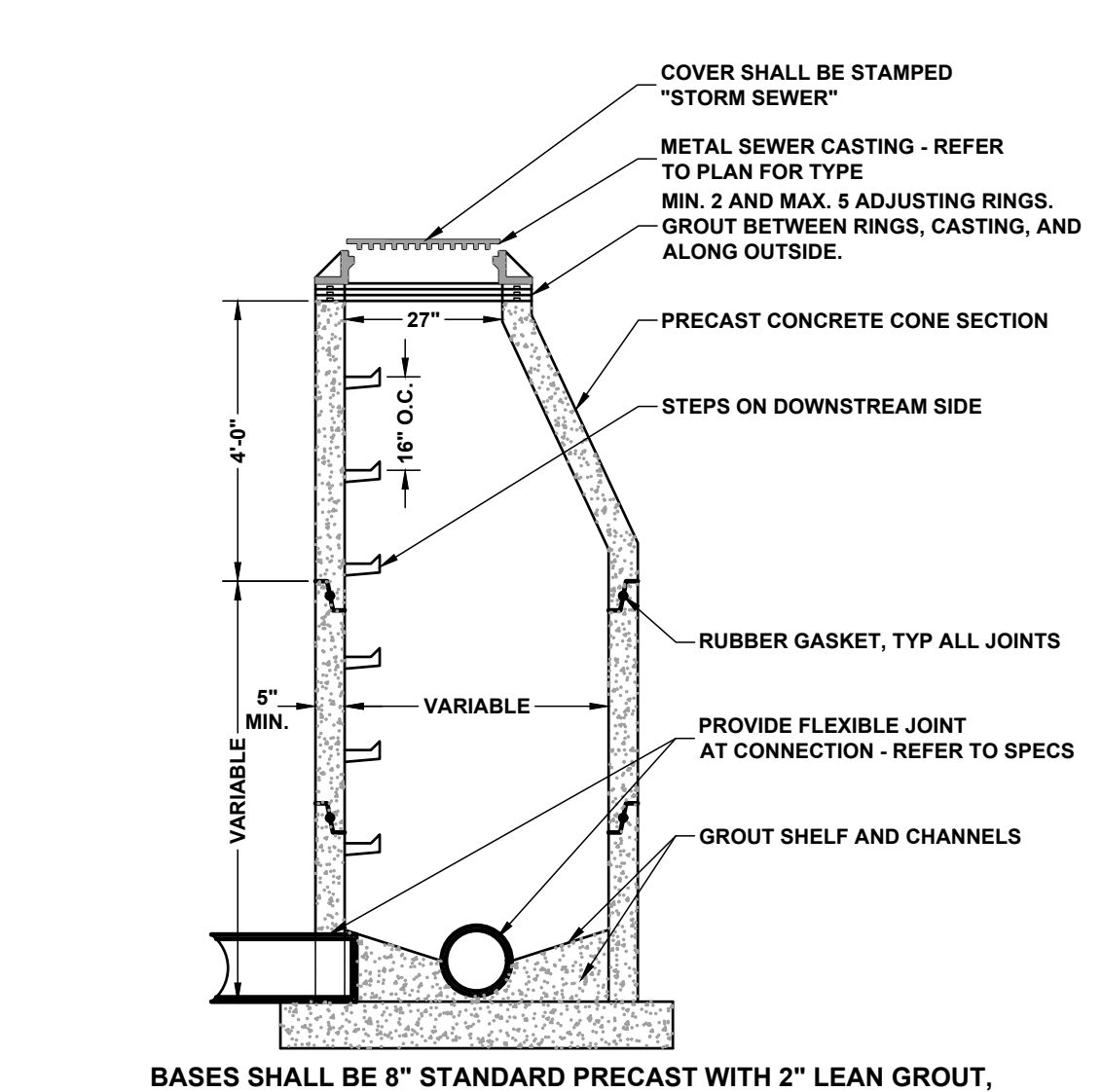
- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 6" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
- CONSECUTIVE BLANKETS SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 6" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.
- BLANKET SHALL BE STAPLED AS PER MANUFACTURER'S RECOMMENDATION.

**3**  
C2.1 **EROSION CONTROL BLANKET**



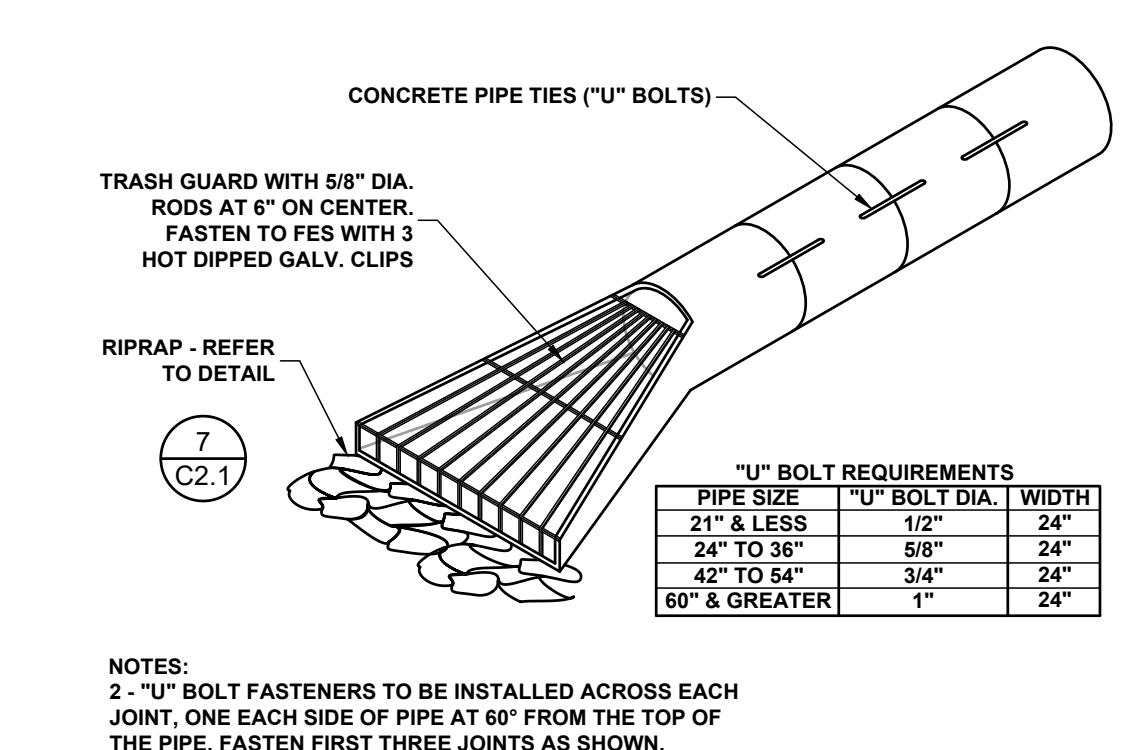
NOTES:  
TRENCH SIDEWALLS TO MEET O.S.H.A REQUIREMENTS.  
UPPER 3 FT. OF BACKFILL SHALL BE COMPACTED TO AT LEAST 100% STANDARD PROCTOR DRY DENSITY. BELOW THIS ELEVATION, BACKFILL SHALL BE COMPACTED TO AT LEAST 95% STANDARD PROCTOR DRY DENSITY.

**4**  
C2.1 **PIPE BEDDING - RCP**



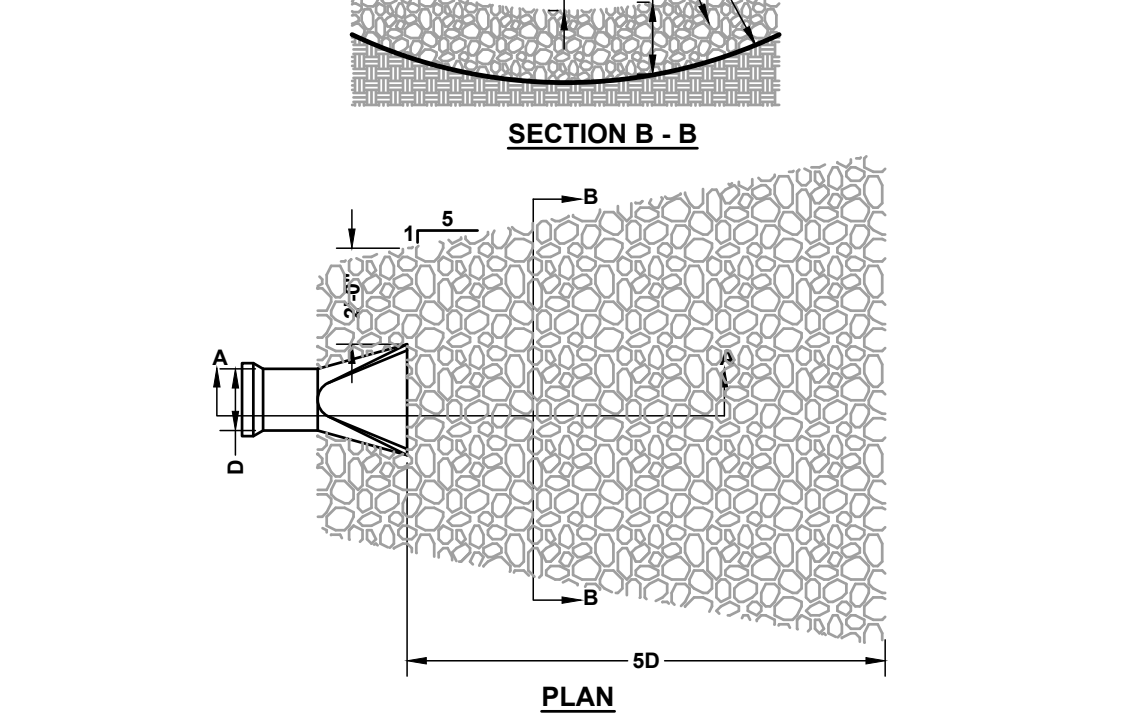
BASES SHALL BE 8" STANDARD PRECAST WITH 2" LEAN GROUT, OR POURED 8" SLAB REINFORCED WITH 6" x 6" 10/10 MESH

**5**  
C2.1 **STORM SEWER MANHOLE**

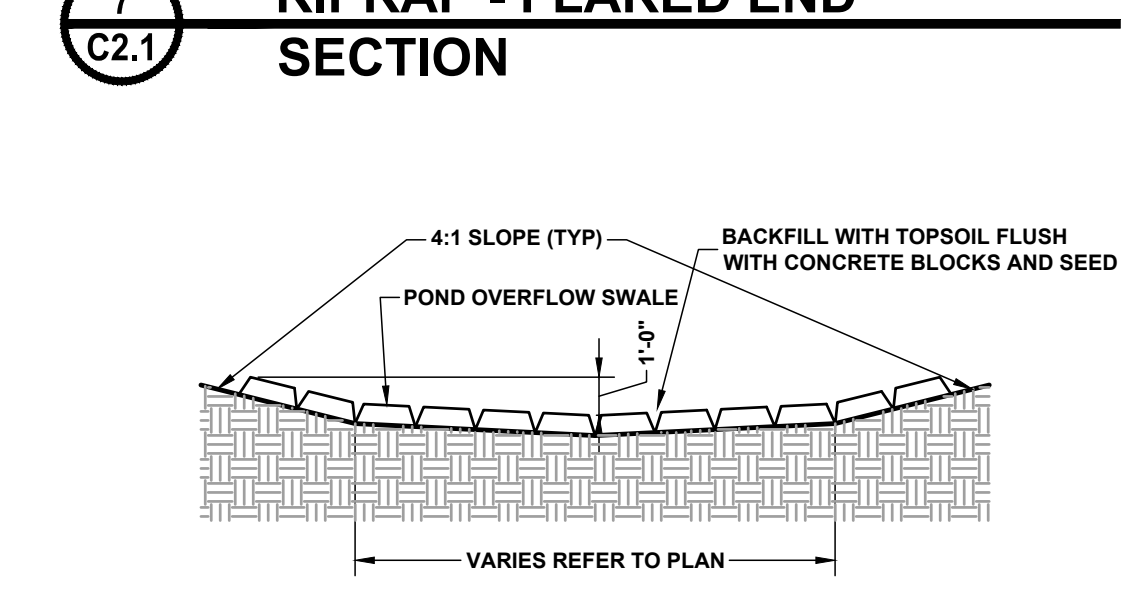


NOTES:  
2 - \"U\" BOLT FASTENERS TO BE INSTALLED ACROSS EACH JOINT, ONE EACH SIDE OF PIPE AT 60\"/>

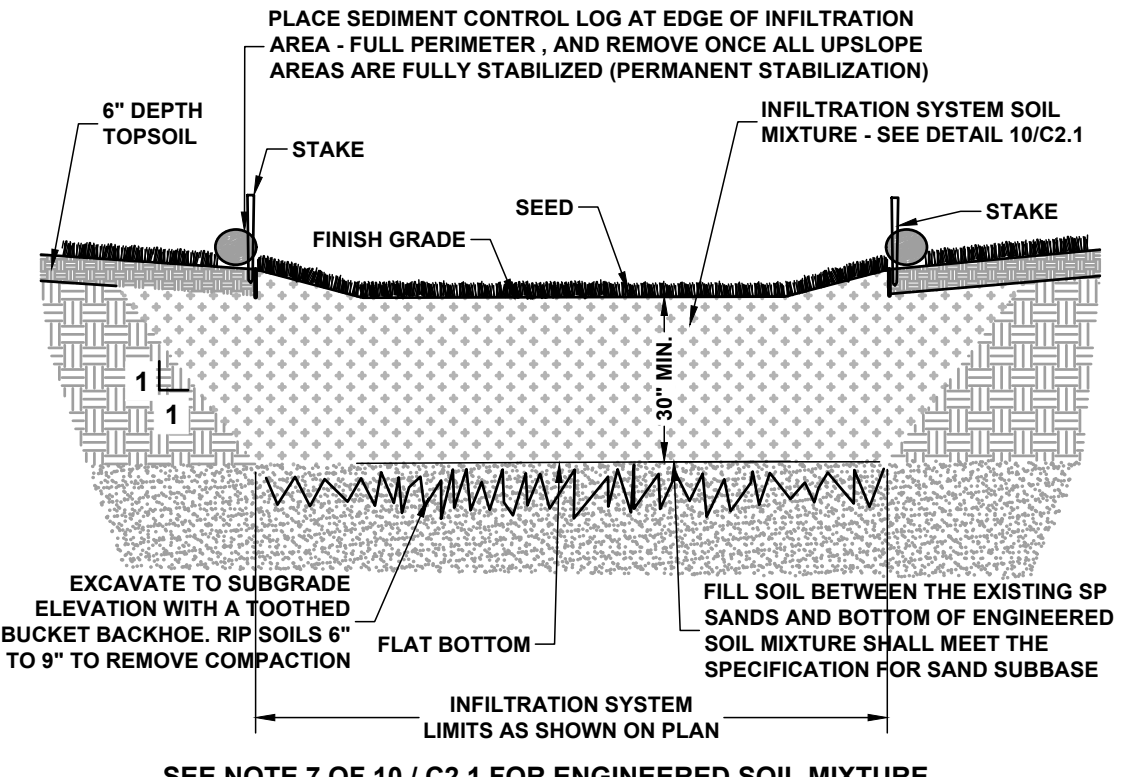
**6**  
C2.1 **RCP FLARED END SECTION (FES)**



**7**  
C2.1 **RIPRAP - FLARED END SECTION**



**8**  
C2.1 **POND OVERFLOW SWALE**

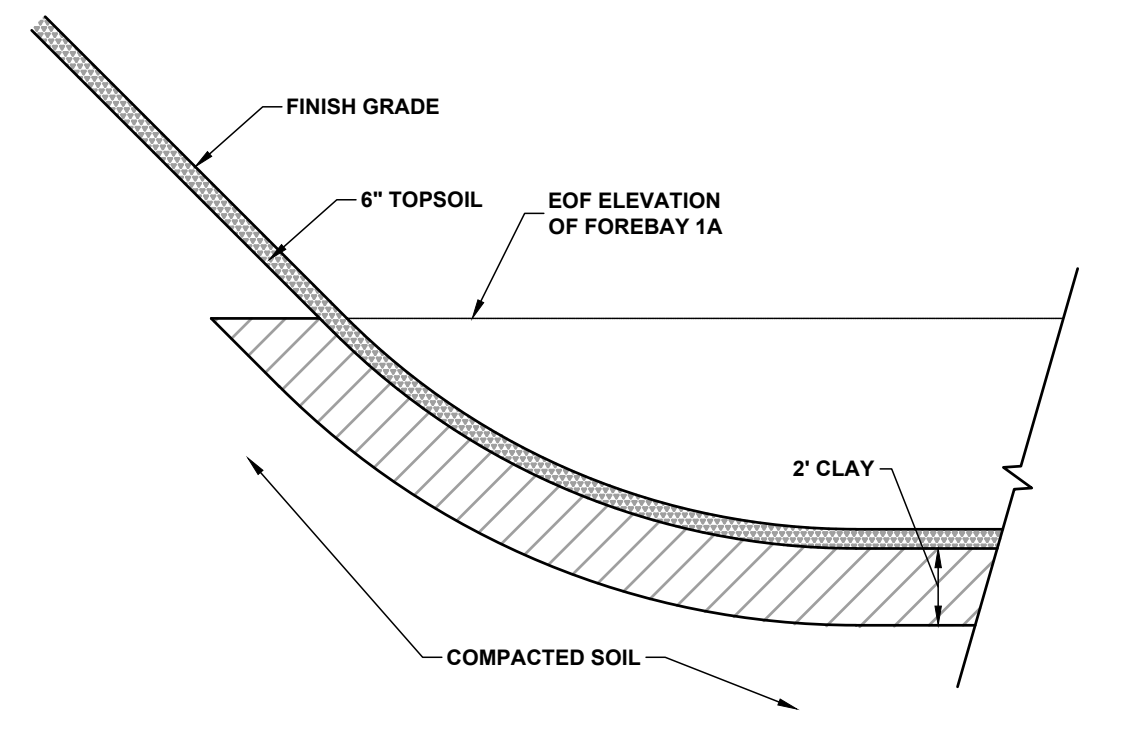


SEE NOTE 7 OF 10 / C2.1 FOR ENGINEERED SOIL MIXTURE

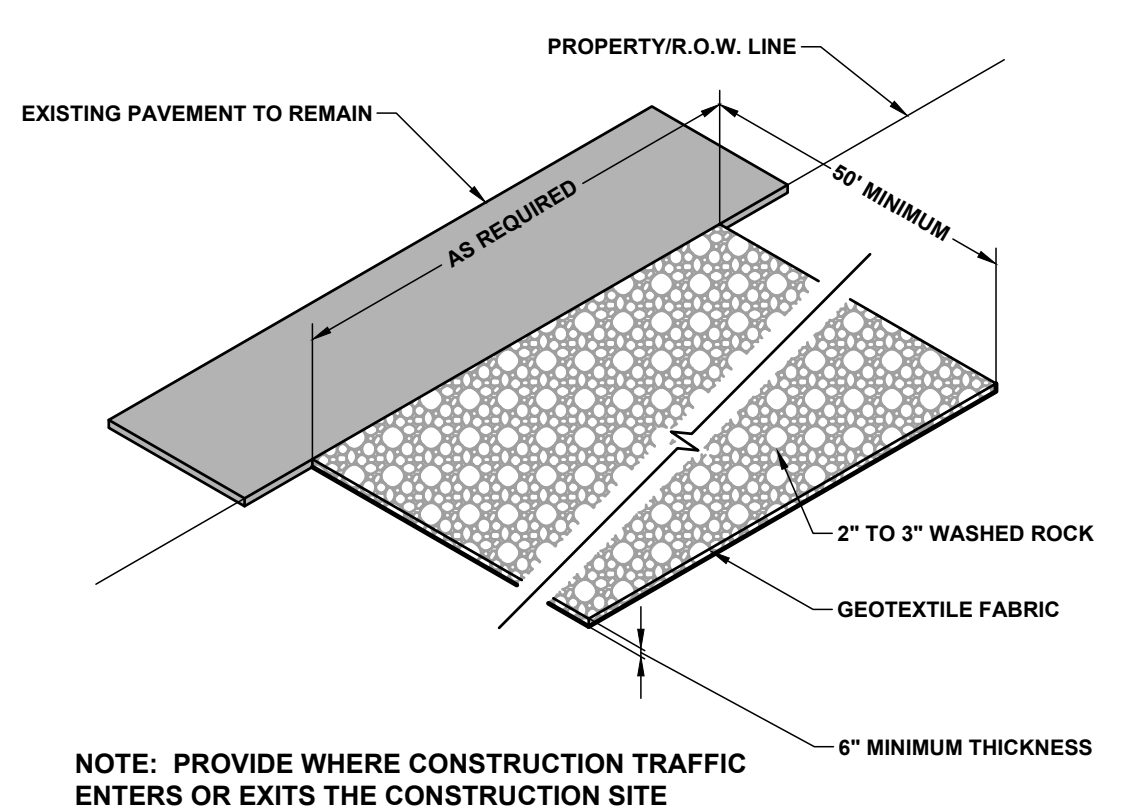
**9**  
C2.1 **TYPICAL SECTION THRU INFILTRATION AREA**

- INFILTRATION AREA CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING:
- INFILTRATION AREA LIMITS SHALL BE SURVEYED AND A VISUAL BARRIER, SUCH AS ORANGE SNOW FENCE, SHALL BE PLACED AROUND THE FULL PERIMETER TO KEEP ALL CONSTRUCTION TRAFFIC, EQUIPMENT AND MATERIAL STOCKPILES OUT OF THE PROPOSED INFILTRATION AREA. THE VISUAL BARRIER MUST BE INSTALLED BEFORE NEW CONSTRUCTION BEGINS AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT.
  - DELIVER SAMPLE MATERIALS ON SITE FOR PRIOR APPROVAL. PRIOR TO BEGINNING THE INSTALLATION, SUFFICIENT MATERIAL QUANTITIES SHALL BE ON SITE TO COMPLETE THE INSTALLATION AND STABILIZE EXPOSED SOIL AREAS WITHOUT DELAY.
  - CARE MUST BE TAKEN TO AVOID CONTAMINATION OF ENGINEERED SOILS WITH SEDIMENT, IN-SITU OR TOPSOIL DURING AND AFTER INSTALLATION. MATERIALS MUST BE SEGREGATED.
  - INSTALLATION WITH DRY SOIL CONDITIONS IS CRITICAL. TO PREVENT SMearing AND COMPACTION, SCHEDULE WORK FOR PERIODS OF DRY WEATHER. DO NOT WORK IF SOIL CONDITIONS ARE WET. EXCAVATION, EOL, PLACEMENT AND RAPID STABILIZATION OF PERIMETER SLOPES WITH TURF SOIL MUST BE COMPLETED BEFORE THE NEXT PRECIPITATION EVENT. TURF SOIL PLACED IN FLOW PATHS SHALL BE SECURED WITH AT LEAST 4 STAKES PER SQUARE YARD. PLACE STAKES ALONG UPHILL SEAM EDGES TO PREVENT UNDERMINING FLOWS UNTIL SOIL ROOTS ESTABLISH.
  - DO NOT LEAVE STORMWATER AREAS AND/OR PERIMETER SLOPES EXPOSED OVERNIGHT. SECURE THE SITE FROM RISK OF PRECIPITATION DAMAGES AT THE END OF EVERY WORK DAY. IN THE EVENT OF RAIN, TAKE ACTION TO DIVERT STORMWATER AWAY FROM THE WORK AREA AND TEMPORARILY COVER UP ALL EXPOSED SOILS WITH FILTER FABRIC OR IMPERMEABLE SHEETING.
  - FIELD OBSERVATION OF EXCAVATION AND SOIL PLACEMENT IS REQUIRED. NOTIFY GEOTECHNICAL ENGINEER PRIOR TO DIGGING. USE BACKHOE WITH TOOTH BUCKET FOR CELL EXCAVATION TO AVOID COMPACTING OR SMearing OF SOILS. DO NOT USE SHOD STEEL FOR EXCAVATION WITHIN THE CELL USE TOOTH BUCKET TO SCARIFY (RIFF) UNDERLYING SOILS 6\"/>

**10**  
C2.1 **INFILTRATION AREA CONSTRUCTION NOTES**



**11**  
C2.1 **SECTION AT FOREBAY - CLAY LINER**



NOTE: PROVIDE WHERE CONSTRUCTION TRAFFIC ENTERS OR EXITS THE CONSTRUCTION SITE

**12**  
C2.1 **ROCK CONSTRUCTION ENTRANCE**

Project No. DL125232  
Date 03/07/2022  
Drawn By BJD  
Checked By DAR  
Revisions

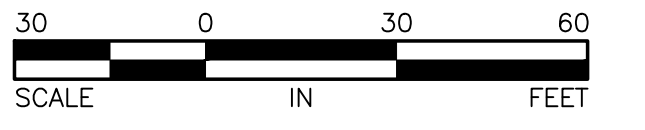
**SITE DETAILS**

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Minnesota.  
DAVID A. REY  
Reg. No. 40180 Date 03/07/2022

**BOLTON & MENK**  
7575 GOLDEN VALLEY ROAD, SUITE 200  
MINNEAPOLIS, MN 55427

**RAMSEY ELEMENTARY SCHOOL  
STORMWATER IMPROVEMENTS**  
ANOKA-HENNING SCHOLS  
15000 County Highway 5  
Ramsey, MN 55303

Sheet **C2.1** of 7



**LEGEND**

- ⊕ = DENOTES GATE VALVE
- ⊖ = DENOTES HYDRANT
- |- = DENOTES WATER LINE
- ⊙ = DENOTES SANITARY SEWER MANHOLE
- >- = DENOTES SANITARY SEWER LINE
- >- = DENOTES ROOF DRAIN/RAIN SPOUT
- ⊙ = DENOTES CATCHBASIN
- ⊙ = DENOTES STORM SEWER MANHOLE
- >- = DENOTES STORM SEWER LINE
- ⊕ = DENOTES ELECTRIC TRANSFORMER
- ⊕ = DENOTES LIGHT POLE
- ⊕ = DENOTES UTILITY POLE
- |- = DENOTES GUY WIRE
- ⊕ = DENOTES ELECTRIC MANHOLE
- |- = DENOTES BURIED ELECTRIC
- |- = DENOTES OVERHEAD ELECTRIC
- ⊕ = DENOTES HAND HOLE
- ⊕ = DENOTES TELEPHONE PEDESTAL
- ⊕ = DENOTES TELEPHONE MANHOLE
- |- = DENOTES BURIED TELEPHONE
- ⊕ = DENOTES GAS VALVE
- |- = DENOTES BURIED GAS
- |- = DENOTES BURIED FIBER OPTIC
- ⊕ = DENOTES GUARD POST
- ⊕ = DENOTES SIGN
- ⊕ = DENOTES EDGE OF WOODS
- ⊕ = DENOTES DECIDUOUS TREE (DIAMETER)
- ⊕ = DENOTES CONIFEROUS TREE (DIAMETER)
- ⊕ = DENOTES SHRUB
- |- = DENOTES SURFACE CONTOUR (1 FT. INTERVAL)
- ⊕ = DENOTES SPOT ELEVATIONS
- ⊕ = DENOTES CONTROL MONUMENT
- ⊕ = DENOTES FOUND IRON MONUMENT
- ⊕ = DENOTES FOUND CAST IRON MONUMENT
- ⊕ = DENOTES CONCRETE SURFACE
- ⊕ = DENOTES BITUMINOUS SURFACE
- ⊕ = DENOTES GRAVEL SURFACE
- ⊕ = DENOTES PAVER SURFACE
- ⊕ = DENOTES PEDESTRIAN RAMP
- ⊕ = DENOTES DOMES

**SURVEY NOTES:**

- The underground utilities shown have been located from field survey information per Gopher State One Call Ticket No. 19352086 and available records. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated although he does certify that they are located as accurately as possible from information available. The surveyor has not physically located the underground utilities. Prior to any excavation, contact Gopher State One Call for an on-site location (651-454-0002). The subsurface utility information on this survey is utility quality level D. This quality level was determined according to the guidelines of CI/ASCE 38-2, entitled "Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data."
- All spot elevations shown adjacent to curb are to top of curb unless noted otherwise.
- Control Monument coordinates are based on Anoka County Coordinate System NAD83 (1986 Adjustment).
- Boundary lines and easements are shown per available record documents and Anoka County mapping. The property PID Number is 23-32-25-43-0003.
- Due to snow cover at the time of the survey, some improvements/encroachments may not have been visible to the surveyor.

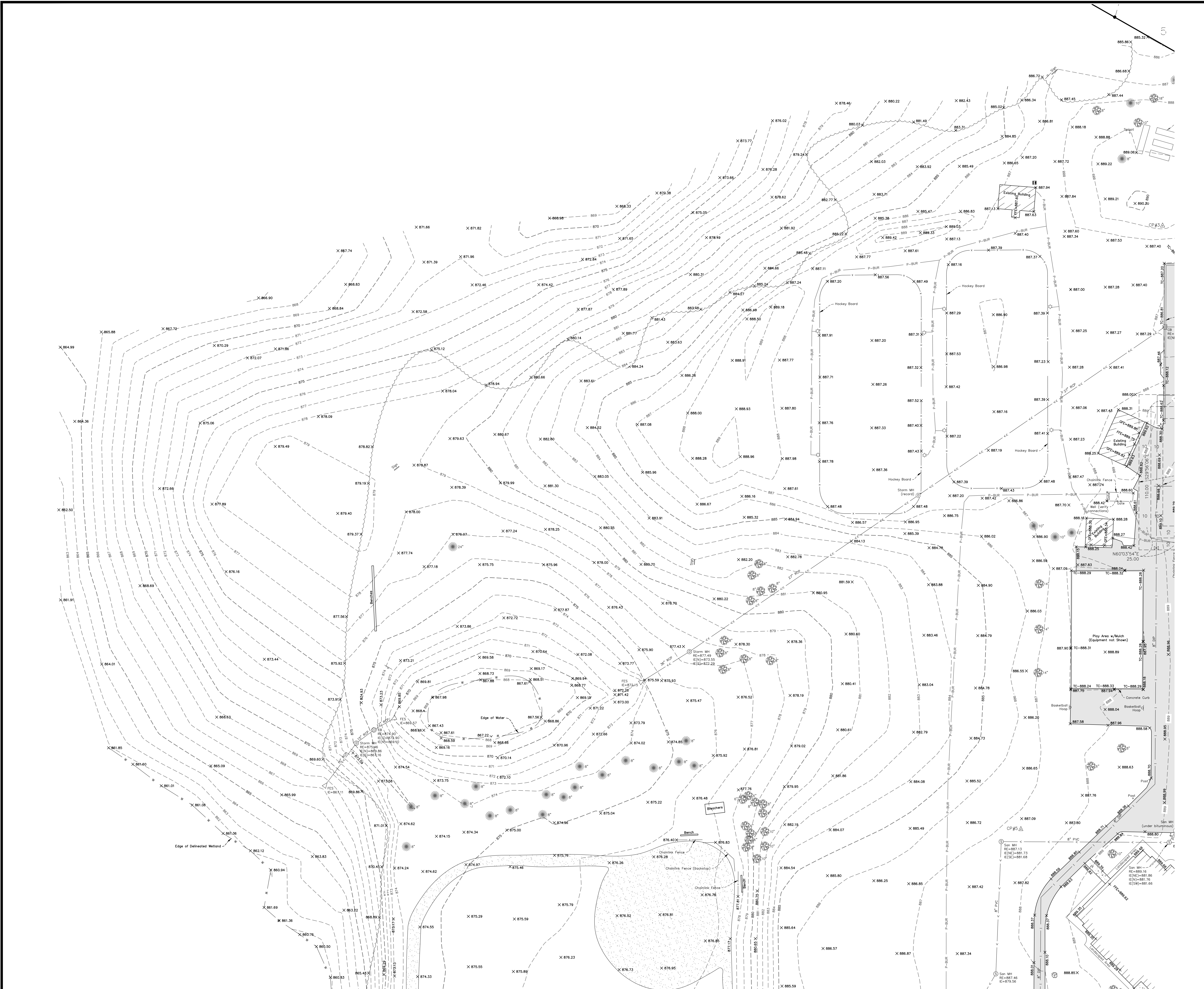
**CONTROL MONUMENTS**

POINT#	NORTHING	EASTING	DESCRIPTION
CP#3	176295.03	461708.77	IRON
CP#5	175798.07	461858.64	IRON
CP#6	175492.03	462061.19	IRON
CP#8	175977.25	462499.93	IRON
CP#9	175917.52	462328.81	IRON

**BENCHMARKS**

BM#1 TOP NUT HYDRANT NEAR THE SOUTHWEST BUILDING CORNER OF RAMSEY ELEMENTARY SCHOOL. ELEVATION = 890.01 FEET (NGVD 1929)

BM#2 TOP NUT HYDRANT IN THE SOUTHWESTERLY QUADRANT OF NORTHEN BOULEVARD AND ENTRANCE TO THE NORTH LOT OF RAMSEY ELEMENTARY SCHOOL. ELEVATION = 893.99 FEET (NGVD 1929)



DATE	REVISION
09/09/21	Added Delineated Wetland

Sep 09, 2021 - 8:10am  
C:\Users\ymichol\AppData\Local\Temp\AcPublish\_60332\2252\_25.dwg

I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Land Surveyor under the laws of the State of Minnesota.

*Brian Person*  
Date: 01/15/20 Lic. No. 49138

**Hakanson Anderson Assoc., Inc.**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.haa-inc.com

DESIGNED BY: BAW  
DRAWN BY: MSS  
CHECKED BY: BP

DATE: 01/15/20  
FILE NO.: 2252.25

**RAMSEY ELEMENTARY SCHOOL**

**SITE SURVEY FOR ANOKA-HENNEPIN ISD #11**